CHAPTER 5
Illustrative Examples

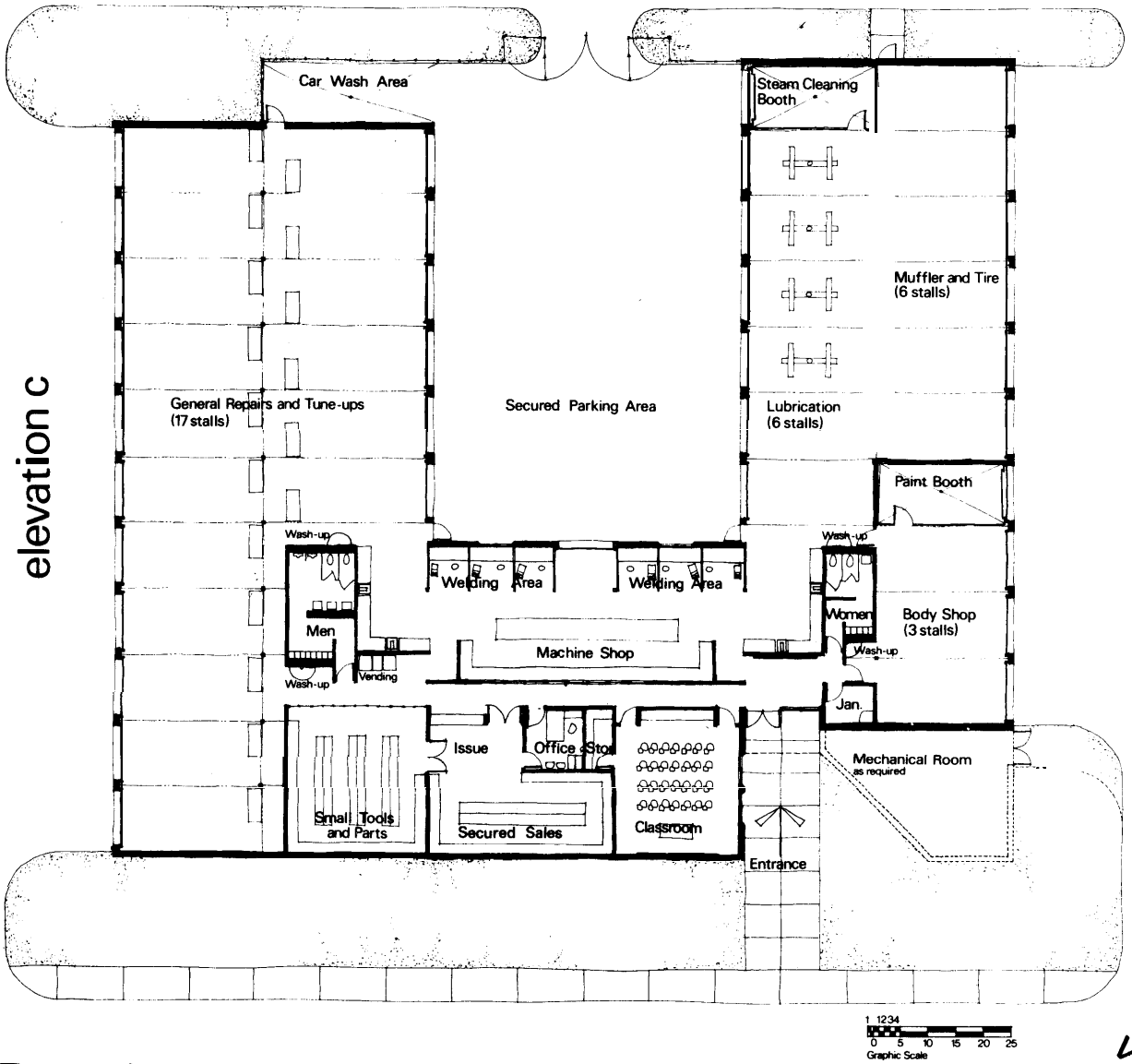
5-1 New Facility Design

a. Examples A and C contain the authorized area of 17,000 square feet and 34 auto stalls (paragraph 3-5 Table A) with an individual vehicle entrance to each stall. Example A, shown with suggested elevations, is a U-shaped plan which breaks excessively long runs of overhead doors and is more pleasing in appearance from the street. Aesthetics is especially important if the center is to be located in an area that is not industrial in nature. Various support activities are located conveniently between the general repair and tune-up stalls and the specialized work stalls.

b. Example B shows an Auto Crafts Center with interior vehicular circulation. It is based on the criteria and space allocation discussed in paragraph 3-5, Table B. Because of the increased area required for interior circulation, only 25 auto stalls are provided instead of the 34 auto stalls authorized for a 17,000 square foot facility. All other areas remain the same size. The facility can be expanded at either end without altering the supporting areas.

c. Example C is similar to Example B except the interior vehicular lane has been eliminated. The result is a long building with vehicle access along the front and back directly to each stall through individual overhead doors. The space used for interior vehicular circulation in Example B has been used to provide the nine additional authorized auto stalls in this example.

Design Solutions

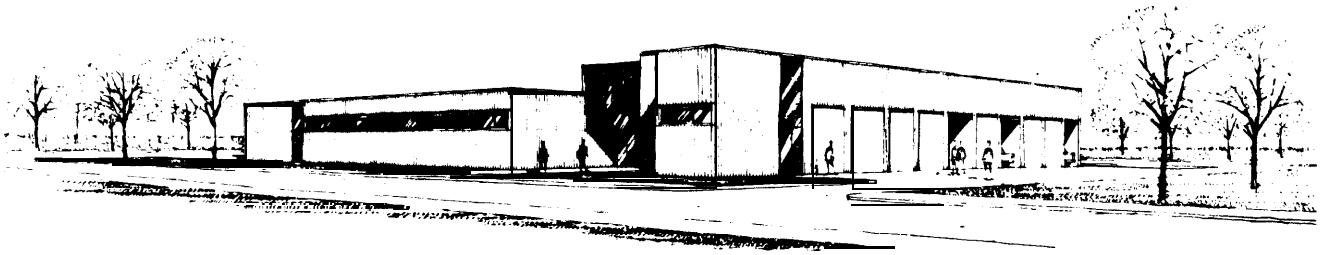


elevation c

Example A
34 Stalls

elevation b

view a



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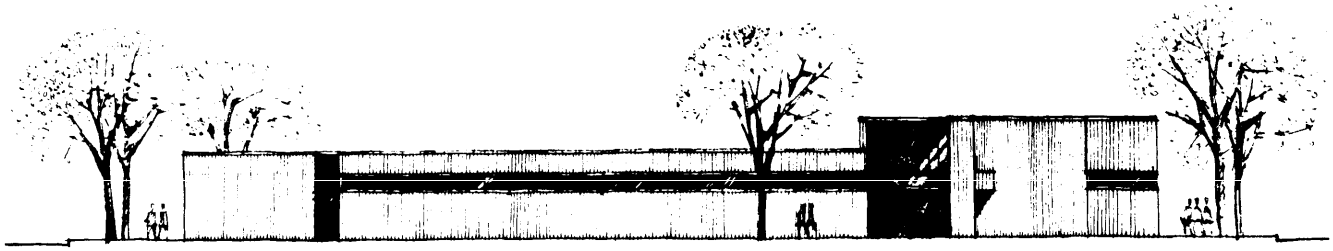
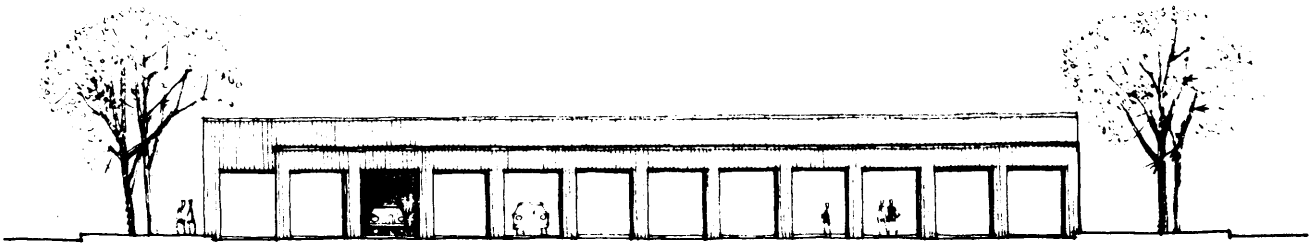
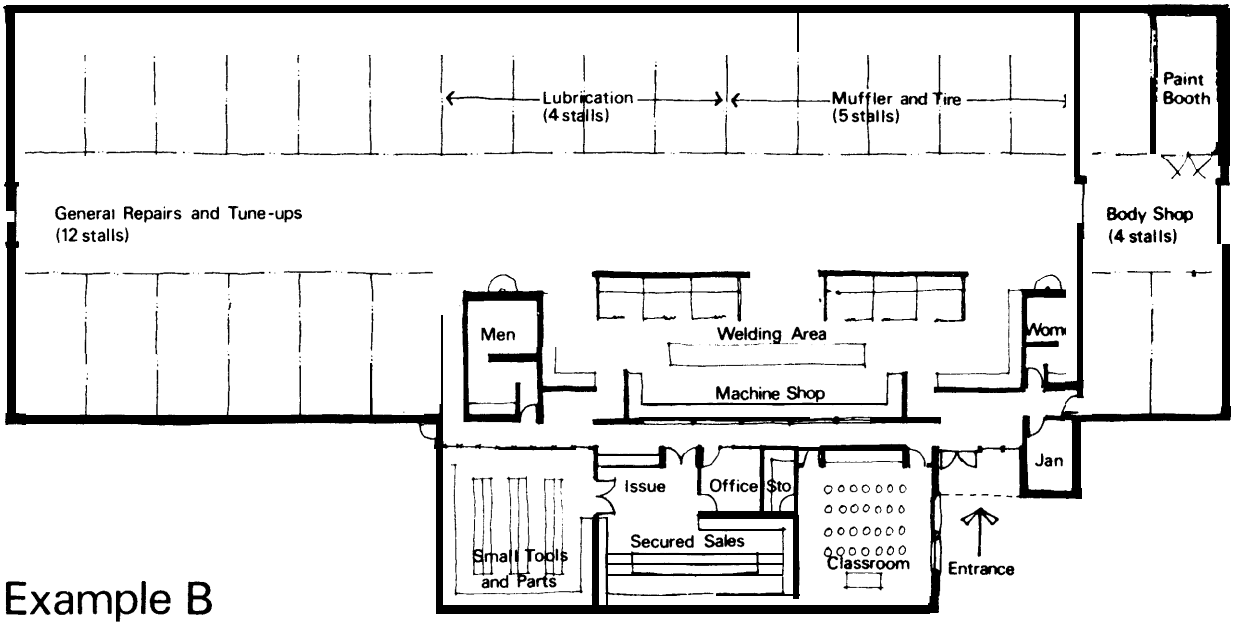


elevation b

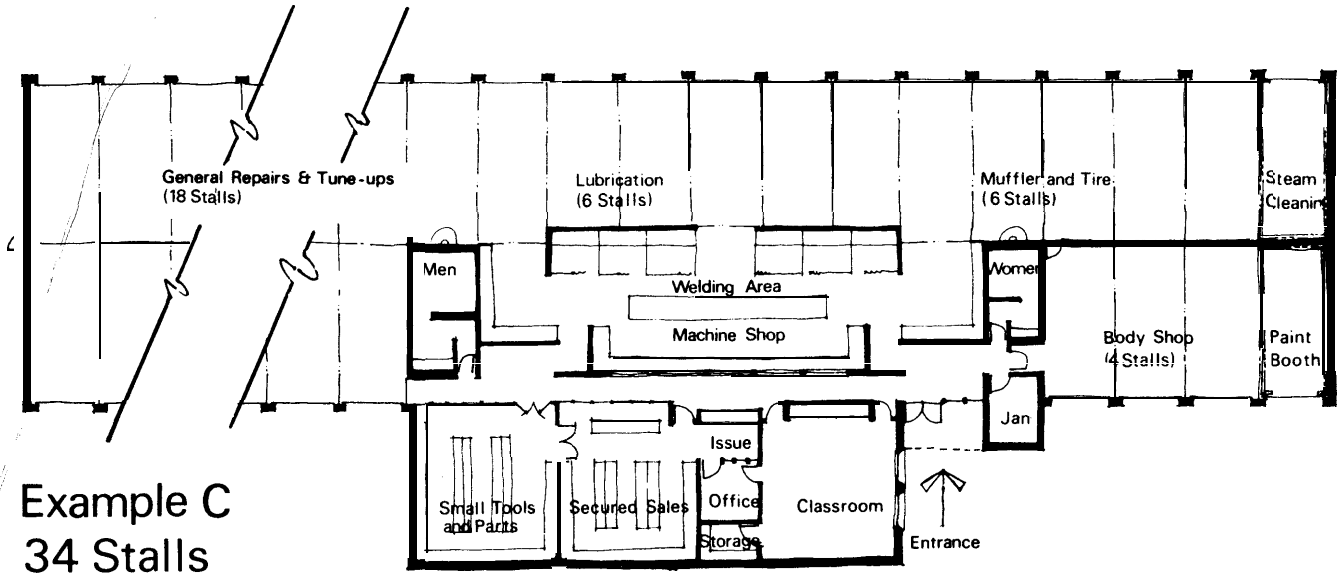


elevation c

Example A



Example B
25 Stalls



Example C
34 Stalls

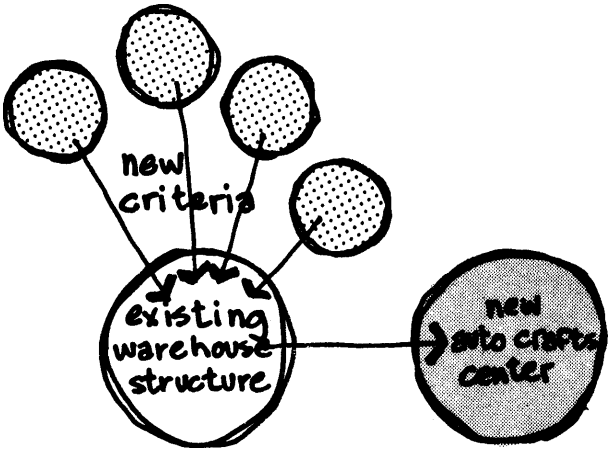
5-2 Conversion of Found Space

a. As the mission or needs change at any installation so do the requirements for particular types of facilities. Thus there is frequently the opportunity to recycle buildings designed for specific uses into functional, economical solutions serving entirely new activities.

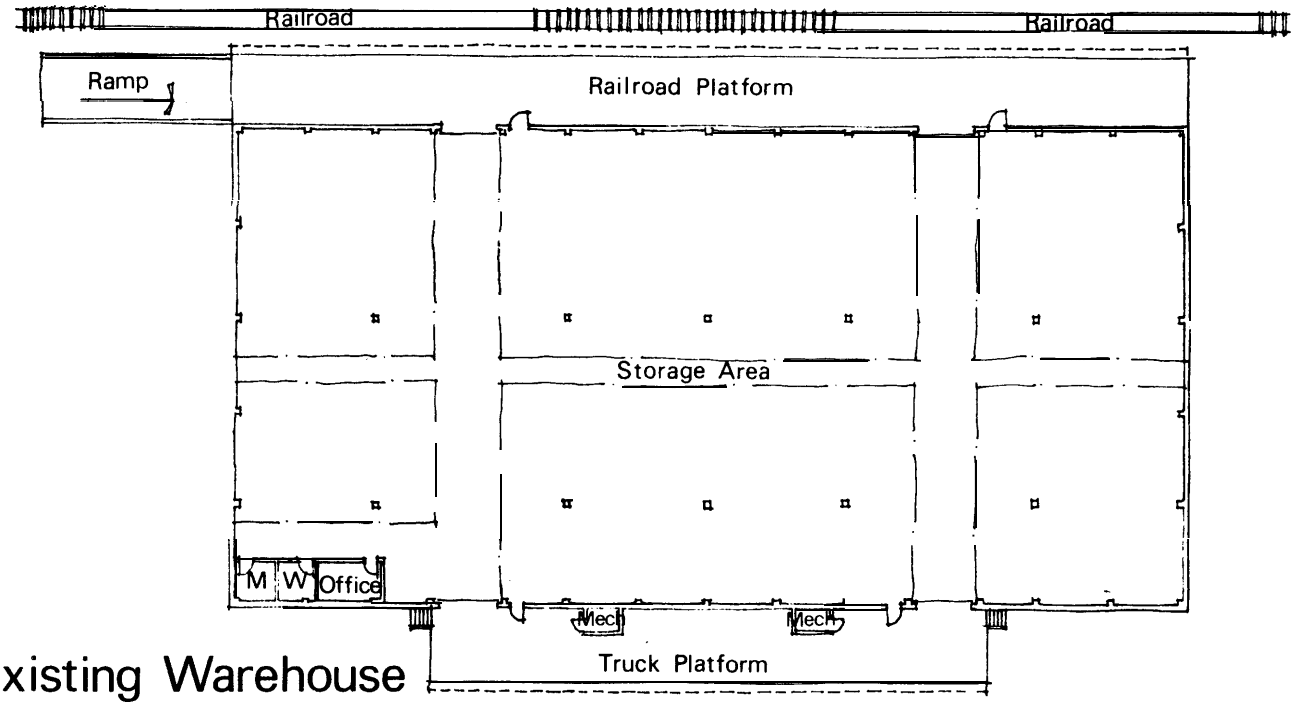
b. To illustrate this point, the following drawings show the conversion of a common warehouse structure into an Auto Crafts Center. The basic description of the original structure is a "Warehouse, Flammable Materials, with Platforms & Canopies, 100' x 200'" as taken from Corps of Engineers Standard Design 33-02-68, dated 19 February 1953. The design solution converts it into an Auto Crafts Center roughly equivalent to other facility types included in this Design Guide.

c. The 20,000 square foot structure provides 31 stalls within the confines of the existing walls, arranged with limited vehicular access from the exterior through existing doors. To the rear, on the railroad platform a prefabricated paint booth and space for steam cleaning adds to the vehicle capacity. Because the floor level is above grade, three ramps have been added, and limited infilling is provided under the front canopy to provide space for an office. Parking for 7 vehicles is provided between the front ramps and additional car storage and parking is available on the sides.

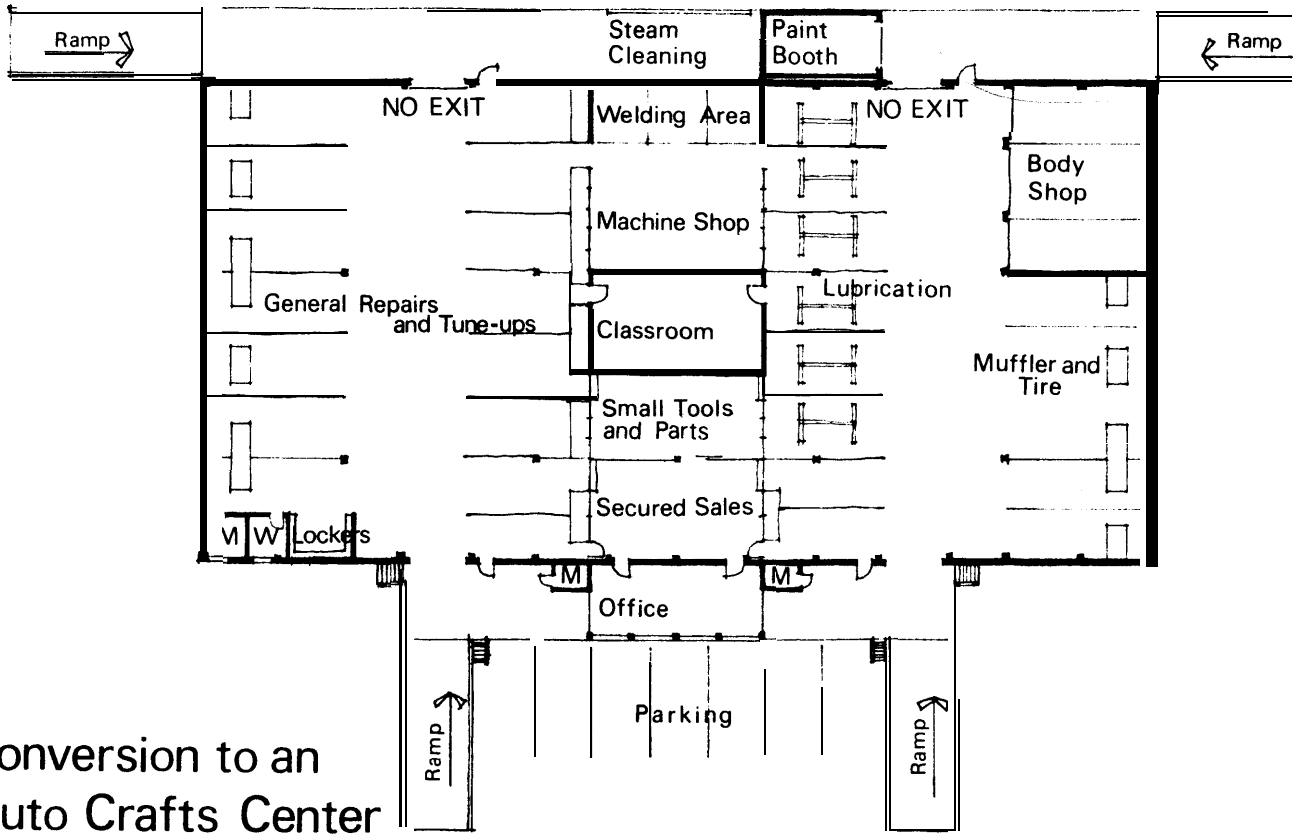
d. This solution is hypothetical and there are many factors to consider in converting found space. Paragraph 2-12 of this guide explores this process in depth.



Conversion



Existing Warehouse



Conversion to an Auto Crafts Center

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